

REMARKS

Applicants respectfully request that the application be reconsidered in view of the above amendments and the following remarks. In the Office Action, dated October 29, 2004, the Examiner withdrew claims 7-16 as being drawn to a non-elected invention. The Examiner further rejected claims 1, 4-6 and 17-19 under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent Application Publication US 2003/0102518 A1 (hereinafter "FRIED"). The Examiner also rejected claims 2, 3 and 20 under 35 U.S.C. § 103(a) as allegedly being unpatentable over FRIED.

By way of this amendment, Applicants have amended claims 1, 2, 5 and 17 to improve form. Claim 6 has been amended to depend from claim 5. Withdrawn claims 7-16 and claims 4, 19 and 20 have been canceled without prejudice or disclaimer. New claims 21-26 have been added. No new matter has been added by the present amendment. Reconsideration of the outstanding rejections is respectfully requested in view of the amendments above and the following remarks.

In paragraph 4, the Office Action rejects pending claims 1, 5, 6, 17 and 18 under 35 U.S.C. §102(e) as allegedly being anticipated by FRIED. Applicants respectfully traverse.

Amended independent claim 1 recites, for example, a memory device that includes "a first pair of fins comprising a first fin and a second fin formed substantially parallel to one another, the first fin and second fin having a first width and being located a distance from one another that is approximately twice the first width," "a second pair of fins comprising a third fin and a fourth fin formed substantially parallel to one another, the third fin and fourth fin having the first width and being located a distance from one another that is approximately twice the first width, wherein the second fin and the third fin are formed substantially parallel

to one another and located a distance from one another that is approximately four times the first width,” “a source region formed at one end of each of the fins,” “a drain region formed at an opposite end of each of the fins,” “a gate formed over the first fin and the second fin,” “a wordline formed over each of the fins” and “a bitline contact formed adjacent at least one of the fins.”

A proper rejection under 35 U.S.C. §102 requires that a reference teach every aspect of the claimed invention. FRIED does not disclose or suggest the combination of features recited in Applicants' amended claim 1. For example, FRIED does not disclose or suggest “a first pair of fins comprising a first fin and a second fin formed substantially parallel to one another, the first fin and second fin having a first width and being located a distance from one another that is approximately twice the first width” and “a second pair of fins comprising a third fin and a fourth fin formed substantially parallel to one another, the third fin and fourth fin having the first width and being located a distance from one another that is approximately twice the first width, wherein the second fin and the third fin are formed substantially parallel to one another and located a distance from one another that is approximately four times the first width.”

In paragraph [0061], FRIED discloses the formation of three fin rings 402 (see FIG. 9), where the two top fin rings 402 will be used to form four n-type FETS, while the bottom fin ring 402 will be used to form two p-type FETS. As further described in paragraph [0062], and shown in FIG. 10, gate structures 404 are formed over portions of the previously created fin rings 402. The upper gate structure 404 crosses over the portions of both of the upper fin rings 402 to form two n-type transistors (see FIG. 10). The left lower gate structure 404 crosses over a portion of the upper left fin ring 402 to form an n-type transistor, and over a

portion of the lower fin ring 402 to form a p-type transistor (see FIG. 10). The right lower gate structure 404 crosses over a portion of the upper right fin ring 402 to form an n-type transistor, and over a portion of the lower fin ring 402 to form a p-type transistor (see FIG. 10). FRIED, however, does not disclose the formation of first, second, third and fourth fins substantially parallel to one another, where the first and second fins are approximately twice a fin width from one another, where the third and fourth fins are approximately twice a fin width from one another, and where the second and third fins are approximately four times a fin width from one another, as recited in amended claim 1. Applicants, therefore, submit that, since FRIED does not disclose or suggest the configuration of fins specifically recited in amended claim 1, FRIED cannot anticipate claim 1. Withdrawal of the rejection of claim 1 is, thus, respectfully requested.

Claims 5 and 6 depend from claim 1 and, therefore, patentably distinguish over FRIED for at least the reasons set forth with respect to claim 1 above.

Amended independent claim 17 recites similar features to those discussed above with respect to claim 1. Claim 17, therefore, patentably distinguishes over FRIED for similar reasons to those set forth with respect to claim 1.

Claim 18 depends from claim 17 and, therefore, patentably distinguishes over FRIED for at least the reasons set forth with respect to claim 17 above.

In paragraph 5, the Office Action rejects pending claims 2 and 3 under 35 U.S.C. §103(a) as allegedly being unpatentable over FRIED. The Office Action alleges that the specific fin widths and heights recited in claims 2 and 3 are obvious in view of FRIED. Applicants submit, however, that the Office Action's allegations do not remedy the deficiencies in the disclosure of FRIED noted above with respect to claim 1, from which

claims 2 and 3 depend. Withdrawal of the rejection of claims 2 and 3 is, therefore, respectfully requested for at least the reasons set forth above with respect to claim 1.

New claims 21-23 depend from claim 17 and, therefore, patentably distinguish over FRIED for at least the reasons set forth above with respect to claim 17.

New claims 24-26 recite, among other features, “a first fin and a second fin formed substantially parallel to one another and located approximately a distance d from one another” and “a third fin and a fourth fin formed substantially parallel to one another and located approximately the distance d from one another, wherein the second fin is formed substantially parallel to the third fin and is located approximately twice the distance d from the third fin and wherein the first and third fins are doped with n-type impurities and the second and fourth fins are doped with p-type impurities.” Applicants submit that FRIED does not disclose the configuration of fins specifically recited in the above features of claims 24-26. New claims 24-26, thus, patentably distinguish over FRIED.

In view of the foregoing amendments and remarks, Applicants respectfully request the Examiner's reconsideration of this application, and the timely allowance of the pending claims. To the extent necessary, a petition for an extension of time under 37 CFR § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1070 and please credit any excess fees to such deposit account.

Respectfully submitted,

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